

RICHARD SHI

Software Developer

CONTACT

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github.com/richard-shi 🐙

SKILLS

Highly Skilled

Java, C, C++, Swift, Javascript

Proficient

Python, Bash, Objective-C
Postgres, Redis, Cassandra
ARM Assembly
L^AT_EX

EDUCATION

Candidate for BSc in Computer Engineering

University of Waterloo
Expected 06/2020

AWARDS

Oracle Certified Associate,
Java SE 7 Programmer
Summer 2015

INTERESTS

World History

Former President of high school
Model United Nations Club;
Actively organized lectures and
mock debates for 30+ students
for regional competitions

Swimming

Strategy Games

Mechanical Keyboards

WORK EXPERIENCE

Hubdoc

Sept 2017–Present

Software Engineer

- Designed and upgraded a responsive data visualization dashboard with **Express**, **Backbone** and **PostgreSQL** for enabling advanced **analytics solutions**
- Created and optimized **hundreds** of **Node** microservices in a small team to automate financial data aggregation for accountants, earning **\$300,000+** in monthly revenue.
- Improved microservice fetch success rate from **58% to 80%**

Rave Media

Jan 2017–Apr 2017

iOS Software Engineer

- Created a novel networking layer for the Rave social video app in **Swift**, reducing request latency by **14%**
- Worked in a small team to add **Rakuten** and **Netflix** support to the app
- Redesigned and optimized memory management of the app, reducing usage by **73%**
- Implemented new build system to cut build times by **84%** and enable Swift frameworks

Blackberry

May 2016–Aug 2016

Software Engineer - Camera Firmware

- Developed Android OS Camera enhancements including a dynamic performance adjuster, enabling **3X video resolution increase** at minimal performance loss
- Optimized Android camera drivers for the Blackberry **Priv**, **DTEK50** and **DTEK60**

PERSONAL PROJECTS

ReactionBot.js

reactionbot-js.herokuapp.com

Node.js, Heroku, Express, PostgreSQL, Slack API, BotKit API, Dashbot API, WebSockets

- Created a chatbot for Slack that allows users to share images and memes with more than **30 engaged teams** since release
- Uses the Slack API with WebSockets on Express and Postgres

Blockchain.js

git.io/chainjs

Node.js, Express

- Created a **Blockchain** implementation in **Node** with a Bitcoin-style Proof of Work algorithm and over-the-network chain distribution with Express

Path Polo - Hack the North 2016

git.io/v9wlz

Android API, Java, Pebble API, Google Maps API

- Built an Android/Pebble watch app to guide the visually impaired using haptic feedback
- Directed users to locations chosen on Google Maps on phone or pebble app

Barcode Scanner

git.io/vdrv8

Swift, iOS API

- Created an iOS app to scan QR codes and barcodes of a variety of types in Swift